## SEQUENCE LISTING

<110>	Curiel, David T. Krasnykh, Victor N.
<120>	Modified Adenovirus Containing A Fiber Replacement Protein
<130>	D6070CIP
<141>	2000-07-10
<150>	US 09/250,580
	US 60/074,844
<151>	1999-02-16
	1998-02-17
<160>	14
<210>	1
<211>	40
<212>	DNA
<213>	artificial sequence
<220>	
<221>	primer_bind
<223>	Forward primer FF.F used to amplify segment of the T4
	fibritin gene encoding amino acids Ser-229 through
	the carboxy terminal Ala-487.
<400>	1
gggaacttga	cctcacagaa cgtttatagt cgtttaaatg 40
<210>	2
<211>	37
<212>	DNA
<213>	artificial sequence
<220>	
<221>	primer_bind
<223>	Reverse primer FF.R used to amplify segment of the T4
	fibritin gene encoding amino acids Ser-229 through
	the carboxy terminal Ala-487.
<400>	2
aggcca'tggc	caatttttgc cggcgataaa aaggtag 37

```
<210>
                3
     <211>
                53
     <212>
                DNA
     <213>
                artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, F5.\Delta3Swa.T, for the introduction of
                SwaI restriction site
     <400>
                3
ttggccccat ttaaatgaat cgtttgtgtt atgtttcaac gtgtttattt ttc
                                                                    53
                4
     <210>
     <211>
                61
     <212>
                DNA
     <213>
                artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, F5.\Delta3Swa.B, for the introduction of
                SwaI restriction site
     <400>
aattgaaaaa taaacacgtt gaaacataac acaaacgatt catttaaatg
                                                            50
                                                            61
gggccaatat t
     <210>
                5
     <211>
                57
     <212>
                DNA
     <213>
                artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, FF<sub>RR</sub>LL.T
     <400>
                5
ggcaggtgga ggcggttcag gcggaggtgg ctctggcggt ggcggatccg
                                                            50
                                                            57
gggattt
     <210>
                6
```

```
<211>
                57
     <212>
                DNA
     <213>
                artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, FFBLL.B
     <400>
aaatccccgg atccgccacc gccagagcca cctccgcctg aaccgcctcc
                                                          50
                                                          57
acctgcc
     <210>
                7
     <211>
                36
     <212> •
               DNA
     <213>
                artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, RGS6H.T
     <400>
gatctagagg atcgcatcac catcaccatc actaat
                                           36
     <210>
                8
     <211>
                32
     <212>
               DNA
     <213>
               artificial sequence
     <220>
     <221>
     <223>
                synthetic oligo, RGS6H.B
     <400>
                8
attagtgatg gtgatggtga tgcgatcctc ta
                                          32
     <210>
                9
     <211>
                27
     <212>
               DNA
     <213>
                artificial sequence
     <220>
     <221>
               primer_bind
     <223>
               primer to PCR amplify FF/6H in pXK.FF/6H
```

<400>	9			
ccctcatgaa	gcgcgcaaga	ccgtctg	27	
<210>	10	•		
<211>	27			
<212>	DNA			
<213>	artifi	cial sequence		
<220>				
<221>	primer	_bind		
<223>	primer	to PCR amplify	FF/6H in pX	K.FF/6H
<400>	10			
cccaagctta	gtgatggtga	tggtgat	27	
<210>	11			
<211>	8			
<212>	PRT			
<213>	Adenov	virus type 5		
<220>				
<221>	DOMAIN	J		
<223>	the be	eginning of the	third pseudo	repeat of the
	fiber	shaft domain		
<400>	11			
Gly Asn Thi	Leu Ser G	ln Asn Val		
	5	8		
<210>				
<211>	26			
<212>	PRT			
<213>	Phage	T4		
<220>				
<221>	DOMAIN	1		
<223>	the si	exth coiled coil	segment of	the $\alpha$ -helical
	centra	al domain of the	fibritin	
<400>	12			
Val Tyr Ser	r Arg Leu A	sn Glu Ile Asp T	hr Lys Gln :	Thr Thr Val
·	5		10	15

## Glu Ser Asp Ile Ser Ala Ile Lys Thr Ser Ile 20 25

	<2	10>		13										
<211>				361										
<212>				PRT										
<213>				artificial sequence										
	<22	20>												
	<22	21>		CHAIN										
<223>				the fiber-fibritin-6H chimera										
	<4	<00		13					٠,					
Met	Lys	Arg	Ala	Arg	Pro	Ser	Glu	Asp	Thr	Phe	Asn	Pro	Val	Tyr
				5					10					15
Pro	Tyr	Asp	Thr	Glu	Thr	Gly	Pro	Pro	Thr	Val	Pro	Phe	Leu	Thr
				20					25					30
Pro	Pro	Phe	Val	Ser	Pro	Asn	Gly	Phe	Gln	Glu	Ser	Pro	Pro	Gly
				35					40					45
Val	Leu	Ser	Leu	Arg	Leu	Ser	Glu	Pro	Leu	Val	Thr	Ser	Asn	Gly
				50					55					60
Met	Ala	Leu	Lys	Met	Gly	Asn	Gly	Leu	Ser	Leu	Asp	Glu	Ala	Gly
				65					70					75
Asn	Leu	Thr	Ser		Asn	Val	Tyr	Ser		Leu	Asn	Glu	Ile	Asp
				80					85					90
Thr	Lys	Gln	Thr		Val	Glu	Ser	Asp		Ser	Ala	Ile	Lys	
_			_	95	~-7	_	_	_	100			_		105
Ser	Ile	GIY	Tyr		GLY	Asn	Asn	Ser		Ile	Thr	Ser	Val	
		_,	_	110			~		115	_	~-3	_		120
Thr	Asn	'l'nr	Asp		IIe	Ala	Ser	lle		Leu	Glu	Leu	Asn	
<b>a</b>	01	01	<b>-</b> 1 -	125	Q1	3	τ	m1	130	<b>-1</b> -	~1	m1	G	135
ser	GIY	GIY	TTE	_	GIN	Arg	Leu	Thr		тте	Glu	Thr	ser	
01	Com	7 ~~	7 ~~	140	Dwo	Com	Com	T1.	145	<b>01</b>	01 <u>~</u>	т1.	T	150
GТĀ	ser	ASD	ASD	11e	PLO	ser.	ser	тте	ьуs 160	σтλ	Gln	тте	гуя	
λαn	ሞኮ∽	ሞኮ∽	Sa~		Glu	S0~	T.o.:	λan		T1~	Val	<u> </u>	Cl.	165
USII	TIIT	1111	PET	170	GIU	PET	пец	VOII	175	тте	vaı	GTÅ	GTU	180
ሞኮェ	Ser	Ser	<u> </u>		Δνα	<b>Δ</b> ] =	Δen	1721		Фrr	Leu	Δen	Gla	
TIIT	SET	PET	сту	ьeu	Ary	AIG	UOII	vaı	SET	ττρ	ьeu	TOIL	GIII	T.E

				185					190					195
Val	Gly	Thr	Asp	Ser	Ser	Gly	Gly	Gln	Pro	Ser	Pro	Pro	Gly	Ser
				200					205					210
Leu	Leu	Asn	Arg	Val	Ser	Thr	Ile	Glu	Thr	Ser	Val	Ser	Gly	Leu
				215					220					225
Asn	Asn	Asp	Val	Gln	Asn	Leu	Gln	Val	Glu	Ile	Gly	Asn	Asn	Ser
				230					235					240
Thr	Gly	Ile	Lys	Gly	Gln	Val	Val	Ala	Leu	Asn	Thr	Leu	Val	Asn
				245					250					255
Gly	Thr	Asn	Pro	Asn	Gly	Ser	Thr	Val	Glu	Glu	Arg	Gly	Leu	Thr
				260					265					270
Asn	Ser	Ile	Lys	Ala	Asn	Glu	Thr	Asn	Ile	Ala	Ser	Val	Thr	Gln
				275					280					285
Glu	Val	Asn	Thr	Ala	Lys	Gly	Asn	Ile	Ser	Ser	Leu	Gln	Gly	Asp
				290					295					300
Val	Gln	Ala	Leu	Gln	Glu	Ala	Gly	Tyr	Ile	Pro	Glu	Ala	Pro	Arg
				305					310					315
Asp	Gly	Gln	Ala	Tyr	Val	Arg	Lys	Asp	Gly	Glu	Trp	Val	Leu	Leu
				320					325					330
Ser	Thr	Phe	Leu	Ser	Pro	Ala	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly
				335					340					345
Gly	Ser	Gly	Gly	Gly	Gly	Ser	Arg	Gly	Ser	His	His	His	His	His
				350					355					360
His														
361							•							
	<210>			14										
	<211>			9										
	<212>			PRT										
<213>				Unkn	own									

<211> 9
<212> PRT

<213> Unknown

<220>
<221> DOMAIN

<223> a peptide ligand containing the RGD motif

<400> 14

Cys Asp Cys Arg Gly Asp Cys Phe Cys

5 9